

REMARKS

By Office Action mailed September 11, 2002, the Examiner has objected to the specification, and the error is corrected by the foregoing amendment. The Examiner also required a new oath or declaration stating that the current oath is defective. Applicant respectfully submits that a new oath should not be required since the inventor's oath filed with the parent application, SN 09/908339 is not defective and contains all the required statements. The present application differs from the parent application as filed only in the drawings, which the oath herein addresses as being included by reference in the first declaration. Accordingly, the oath filed in 09/908339 refers to the entire specification including drawings in the present application. The drawings were inadvertently omitted from the parent application when filed, but the specifications are the same. Nevertheless, Applicant has undertaken to obtain a second declaration from the inventor to avoid any unnecessary confusion; however the applicant has not yet been able to obtain the same. The inventor has only recently been located, and has not refused to sign a new declaration, but such has not yet been received.

The Examiner has rejected the original claims on a number of technical grounds, which have been addressed and corrected by the foregoing. In redrafting the above claims, applicant has recited elements in specific terms rather than by reference to drawings, or the like. Thus, while the amended and new claims may not look much like the original claims, the same embodiments are claimed. Therefore, the examiner's comments and rejections of those claims have been considered and corrected in the new dependent claims. Accordingly, the remaining Claims 2 - 5, 8, and 10-11 are submitted as complying with 35 U.S.C. 112 and do not claim new matter not claimed in the original claims and are therefore supported by the specification. In addition, Claim 1, the only original method claim has been cancelled from this application and the device claims are cancelled in the parent application, eliminating the potential double patenting objection noted by the Examiner.

The Examiner has also rejected Claims 1,2, 5, and 7-9 under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 859,733 to Bot, US Patent No. 3,038,456 to Dreisin, US Patent No. 2,781,943 to Carlstrom, and US Patent No. 2,058,452 to Hoffman, and Claims 2, and 4 as being anticipated by US Patent No. 4,601,475 to Nicholson.

US Patent No. 859,733 to Bot disclosed a frustaconical flue gasket forced downward into a recess and restrained by a collar and would be directed against amended Claim 8. As described in the specification and illustrated in the proposed drawings, the present invention uses the radially outward expansion of the element caused by flattening the cone or dome to cause sealing engagement within the hole, as well as to constrict the central opening. The drawings in Bot imply that the ring is not flattened since the bolts 7 show some but very little thread below nuts 10 which are fully threaded downward, implying only a little additional downward deflection of the ring 4 is possible. Moreover, the Bot specification at lines 43 to 45 states that the flue can be "readily removed" which further shows that the ring 4 is not to be flattened as that would prevent easy removal. Finally, the presence of the sturdy and permanent collar 5 demonstrates that the ring 4 is to retain its conical shape since it must act as a spring that must be restrained

US Patent No. 3,038,456 to Dreisin discloses a gasket that is designed to grip an nozzle head and is not intended, nor able to seal and securely engage the inner wall of a hole, since the drawings (Fig 3) show a gap around the perimeter of the flattened gasket. In addition the text describes the gasket as "a loose fit" within the bore at page 2, line 7. The Dreisin gasket does not reduce the bore nor connect the nozzle to the bore since it does not remain in the bore, being removed when the nozzle is withdrawn (page 2, lines 37-40). Accordingly, the claims of the present application are not anticipated by Dreisin, nor is the present invention suggested by Dreisin.

US Patent No. 2,781,943 to Carlstrom discloses a flexible ring that acts like a gasket in sealing the junction between a high pressure port and a cap, with the pressure of the fluid flexing the ring into sealing contact with both the port and the cap. As disclosed, the ring is not substantially deformed or stressed by the opposing surfaces, page 1, lines 25 – 30. In fact the disclosure shows and describes using a flat ring that is deformed by the high pressure fluid into a conical shape, in Figs. 8 and 9, described on page 4, lines 19 – 36. Moreover, the only section of the Carlstrom ring that could be said to be supported against pressure, is the interior of the ring. Clearly the element as claimed in the present invention is neither shown nor suggested by the Carlstrom device.

US Patent No. 2,058,452 to Hoffman discloses a washer that is deformed to press fit in a recess so as to remain imbedded when the bolt is removed. Thus the purpose of the Hoffman washer is not to seal or reduce the hole, nor to connect the bolt to the hole, and while the washer

is intended to remain in place after the bolt is removed, it is to be expected that the removal of the bolt is only temporary. The stated use of the washer in Hoffman indicates that it is not intended to grip the bolt in any way as that would interfere with the washer remaining after removal of the bolt.

As to the rejection of Claims 2, and 4 as being anticipated by US Patent No. 4,601,475 to Nicholson, it should suffice to point out that the shaft is shown to freely rotate as well as reciprocate and thus would not be expected to exert any axial force on the seal 3, and that the seal does not fit within a hole at least as illustrated.

The Examiner has finally rejected Claims 3 and 6 as being obvious in view of US Pat No. 3,469,490 to Pearce. Claims 6 are no longer pending, but amended claim 3 recites an elastomer inserted between two elements. Pearce essentially teaches using a conical flange to force a flowable sealant down into a threaded bore. The flange rim of Pearce is not supported within a hole and clearly would not function as intended if it were. The Pearce flange has to be integrally formed or connected to the bolt head, and cannot be disconnected as is the useful feature of Hoffman, having the removable bolt. To the extent the Pearce sealant would secure the flange to the site, it would duplicate the retention of the washer in Hoffman. Therefore, combining Pearce with the Hoffman, or vice versa is neither suggested, nor advantageous.

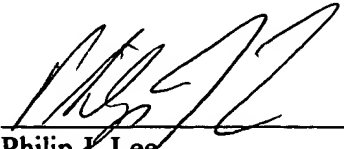
Attached hereto is a marked up version of the changes made to Claim 1 by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

In view of the above, each of the presently pending claims in this application, are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and that a Notice of Allowance be issued in this case.

Respectfully submitted,

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- 2.) A device for sealing [or reducing of drill holes or their connection to a tube end or similar, characterized by] a hole having a wall of surrounding material and a predetermined inside diameter, the device comprising at least one element [(4)] with a disc shaped surface and generally uniform thickness, having a radially outer rim, smaller than the diameter of the [drill] hole accepting the element, and having a cone or dome [shaped configuration to achieve at least a radial shift and press fit of the rim zone (5) of the disc shaped surface (4) with the wall of the drill hole under axial pressure, possible with an additional tumbling action, and at least temporary support of the element] shape, with a central apex raised above the rim in a first direction, the outer rim having a large enough diameter relative to the diameter of the hole that the rim expands radially outward to engage the hole wall upon application of an axial force applied in the first direction to the rim and a second axial force applied in a second opposing direction to the central apex .
- 3.) A device according to claim 2, [characterized by] further comprising two or more similarly shaped elements [(4) being insertable into the drill hole] assembled on top of each other[, where they can be pressed in together, whereby advantageously a sealing disc (7) from] with the apex of each facing in the same direction, and with a sealing disc formed of elastomer sealing material [can be provided] inserted between two [outer] elements.
- 4.) Device per claim 2, [characterized by the element (4') being configured can shaped with an outer shoulder ring (8) to sit on the rim of the hole, whereby the bottom of this element (4') forms the disc shaped surface with cone or dome shaped configuration] wherein the element is formed as a cone or dome shaped transverse bottom at one end of a cylinder, the other end comprising a radially outwardly projecting shoulder having a greater diameter than the hole.

- 5.) [Device per claim 2, characterized by the element (4") to reduce drill holes being configured as a perforated disc] A device to reduce a hole having a wall of surrounding material and a predetermined inside diameter, the device comprising at least one element with a frustaconical disc shaped surface and a generally uniform thickness, having a base and a top, with a radially outer rim forming the base with a smaller diameter than the hole and a central opening at the top, the outer rim having a large enough diameter relative to the diameter of the hole that the rim expands radially outward to engage the hole wall upon application of an axial force applied to the rim in a first direction toward the top and a second axial force applied against the top in a second opposing direction toward the rim
- 8.) The Device per claim [2] 5, [characterized by the fact that] [the element (4") to connect the drill hole (1) with a tube end (11) is configured as a perforated disc, whereby then under pressure a radial shift and press fit of the rim zone of the disc shaped surface with the wall of he drill hole as will as the edge of the hole of the disc shaped surface with the cylinder] wherein the diameter of the central opening is larger than the diameter of a tube end and small enough that upon application of an axial force applied to the rim in the first direction toward the top and a second axial force applied against the top in the second opposing direction toward the rim, the central opening reduces to engage the wall of the tube end.